



January 3, 2017

Mr. Gary Greulich
New Jersey Department of Environmental Protection
Northern Regional Office
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

RE: Remedial Action Progress Report No. 22 for the Industrial #2 Redevelopment Area Portion of the Former General Motors (GM) Linden Assembly Plant, 1016 West Edgar Road, Linden, Union County, New Jersey 07036; DUK059.701.0222.

Dear Mr. Greulich:

On June 3, 2011, the New Jersey Department of Environmental Protection (NJDEP) approved the New Jersey Remedial Action Work Plan and RCRA Corrective Measures Proposal Addendum No. 4 (RAWP) for the Industrial #2 Redevelopment Area of the Former GM Linden Assembly Plant (Site; SRP PI# 621084; Case Tracking Number: E20040531-Industrial). The June 3, 2011 approval letter requested a Remedial Action Progress Report for the Industrial #2 Redevelopment Area on/by September 30, 2011. Subsequent reports will be submitted on a quarterly basis.

As discussed during extensive correspondence with NJDEP, the industrial portion of the Former GM Plant, which includes the Industrial #1 and Industrial #2 Redevelopment Areas, was sold in late-2013 by Linden Development LLC to Duke Linden LLC (Duke Linden). Duke Realty Corporation is a primary member of both the former owner (Linden Development LLC) and new owner (Duke Linden) and will provide for consistent implementation of the previously-approved remedial strategy outlined in RAWP Addendum No. 4. The project team has remained unchanged since the last progress report.

As part of the property transaction, NJDEP assigned the following updated identification numbers for the industrial portion of the Former GM Plant which includes the Industrial #2 Redevelopment Area:

- Program Interest Number: 621084
- Case Tracking Number: E20040531-Industrial

This letter constitutes Remedial Action Progress Report No. 22 for the Industrial #2 Redevelopment Area. Hull & Associates, Inc. (Hull) has prepared this report on behalf of Duke Linden to summarize remedial activities completed on the Site between July 1, 2016 and September 30, 2016.

Requirements, according to N.J.A.C. 7:26E-6.6, are shown below in ***bold italics***, with Hull/Duke Linden's update following. The report certification required by N.J.A.C. 7:26E-1.5 is included in Attachment A.

1. NJDEP requires a description of each planned remedial action.

- i. Scheduled to be initiated or completed within the reporting period;***
- ii. Actually initiated or completed during the reporting period; and***
- iii. Scheduled but not initiated or not completed during the reporting period, including the reasons for the noncompliance with the approved schedule.***



Soil

As outlined in the approved RAWP, the remedial activities for soils on the Industrial #2 Redevelopment Area consist of the following:

- a. Excavation of approximately 1,715 yd³ of soil containing chemicals of potential concern (COPCs) at concentrations above applicable standards from AOI-7;
- b. Establishing deed restrictions or environmental covenants to maintain commercial/industrial land use at the Site;
- c. Regrading the site to achieve the grade necessary to support the proposed redevelopment;
- d. Constructing building slabs, parking areas and roadways and placing one foot of clean soil over geotextile fabric in future greenspaces to preclude direct contact exposures to future receptor populations and/or provide cover to historical fill material; and
- e. Surveying to demonstrate that all areas are covered with engineering controls (e.g., building slabs, parking areas and roadways) or one foot of clean soil.

The excavation activities within AOI-7 were completed in March and April 2012. A summary of the excavation activities, confirmatory sampling results, soil disposal and other details were provided in Quarterly Progress Report No. 4, dated June 30, 2012. As discussed in that report, the confirmatory sampling results indicate that the AOI-7 excavation activities successfully removed the petroleum-impacted soils and achieved the cleanup goals specified in the approved RAWP.

Fill Material Import

During the reporting period clean, native, virgin crushed stone from the Bound Brook and the Fanwood Crushed Stone Company quarries were imported for use during building modifications. As such, characterization sampling was not required pursuant to the RAWP. This material was utilized on both the Industrial #1 and Industrial #2 Redevelopment Areas and the quantities documented in Remedial Progress Report 29 for the Industrial #1 Redevelopment Area.

Groundwater

On August 25, 2015, Duke, Hull and JM Sorge met with the NJDEP Case Manager to discuss establishing Classification Exception Areas (CEA) for the Retail and Industrial portions of the site. The groundwater impacts associated with the disputed groundwater area are associated with off-site sources. Based on the meeting, a groundwater permit and CEA will be established for the overburden groundwater zones over a portion of the Industrial #1 and #2 Development Areas in the AOI-6 area. Additional quarterly groundwater sampling was conducted to support the monitored natural attenuation remedy. No groundwater monitoring occurred during the current reporting period. The CEA will be submitted to NJDEP upon completion of tenant building modifications.

2. ***NJDEP requires discussion of problems and delays in the implementation of the RAWP, which should include proposals for corrections.***

During the current reporting period, Building 11 tenant modifications continued. The Building 11 area occupies the Industrial # 2 Redevelopment Area and a portion of the Industrial #1 Redevelopment Area abutting the Building 12 footprint. The modifications will temporarily affect

portions of interior and exterior engineering controls (hardscape surfaces and clean cover greenspace area) during their build-out of the structure. Tenant modifications to the Industrial #2 area included the removal of exterior concrete aprons and asphalt to construct a refrigeration skid building and cooling towers, installation of transformer pad, and expanding sub-surface utilities. On-going tenant modifications to Building 11 will delay submittal of the soil Remedial Action Report for this combined area of the Site until the engineering controls are replaced. Upon completion of the planned modifications, the relied-upon engineering controls (e.g., building slabs, asphalt cover, etc.) in the RAWP will have been implemented to eliminate exposure of Site receptors to potential contaminants in Site soils.

3. NJDEP requires proposals for a deviation from, or modification to, the approved RAWP.

No deviations from, or modifications to, the approved RAWP are planned or required at this time.

4. NJDEP requires submittal of a revised schedule pursuant to N.J.A.C. 7:26E-6.5, to reflect the changes as noted in 1 through 3 above.

A revised schedule showing the tenant's anticipated construction schedule for Building 11 modifications and build-out was previously provided in Remedial Action Progress Report No. 28 for the Industrial #1 Redevelopment Area.

5. NJDEP requires an updated status of all permit applications relative to the critical path schedule.

The permits required for initiation of the remedial activities are summarized below.

Permit/Approval Type	Status	Notes
Planning Board Approval	Approved 11/17/08	Site plan approved by City of Linden Planning Board
NPDES Permit (Storm Water)	Approved 9/16/09	NPDES Permit No. 0088323
Soil Conservation District	Approved 9/16/09	Approved by Somerset-Union Conservation District
Building Permit for Building 11	Approved 9/24/15	

6. NJDEP requires a listing of each remedial action to be performed during the next reporting period.

During the current reporting period, Building 11 tenant modifications continued. The modifications will temporarily affect portions of Industrial #2 engineering controls (hardscape surfaces and clean cover greenspace area) during the tenant build-out of the structure. During the current reporting period, modifications to the Industrial #2 area included removal of exterior concrete aprons and asphalt to allow for the construction of a refrigeration skid building, cooling towers, and a transformer pad. It is anticipated that the majority of the replacement exterior engineering controls will be completed during the next reporting period.

7. NJDEP requires costs of each remedial action.

- i. Annual summary of all remedial action costs incurred to date; and
- ii. Revised cost estimate for remedial actions remaining to be performed.

Given that significant construction and remedial implementation has not yet commenced, no significant remedial costs have been accrued in Industrial No. 2, with the exception of costs for the

storm sewer cleaning (i.e., approximately \$7,000) and the previously completed AOI-7 excavation project. The costs for the AOI-7 activities totaled approximately \$240,000 at project completion, which is below the amount used in the current remediation cost estimate.

The overall cost estimate for completing remedial activities remains consistent with that presented in the RAWP (i.e., approximately \$11,900,000 for earthwork and construction of engineering controls).

8. ***NJDEP requires a tabulation of sampling results [according to N.J.A.C. 7:26E-3.13(c)(3)] received during the reporting period and a summary of the data and any conclusions, presented in a format consistent with N.J.A.C. 7:26E-4.8.***

Concrete from the exterior concrete apron was removed during tenant modifications and is being temporary stockpiled on the Retail Development Area of the site until it is sent to a recycling facility in Pennsylvania. Based on the volume of concrete removed, a total of 2 concrete samples (CS-19 and CS-20) were collected on October 17, 2016 and analyzed for polynuclear aromatic hydrocarbons and polychlorinated biphenyl per NJDEP guidance. Tabulated concrete sampling results for the interior floor slab, portions of the tilt-up pre-cast walls and exterior apron are provided in Attachment B. The results were below NJDEP direct contact standards and impact to groundwater screening levels.

9. ***NJDEP requires a summary of active groundwater remedial actions.***

- i. ***Groundwater elevation maps with groundwater flow shown immediately before and during active groundwater remediation;***
- ii. ***Graphs depicting changes in concentrations over time for all impacted wells as well as all down-gradient wells;***
- iii. ***Summary of volume of water treated since last reporting period and the total volume treated since active remedial action commenced; and***
- iv. ***Summary of groundwater contamination, indicating either that contamination remains above applicable standards (include a proposal detailing additional remedial actions) or that concentrations are below applicable standards.***

The RAWP for the Industrial #2 Redevelopment Area was limited to soils only. Therefore, this section is not applicable.

10. ***NJDEP requires a summary of natural remediation groundwater remedial actions.***

- i. ***Summary table of the groundwater monitoring results collected; and***
- ii. ***Conclusions whether data indicate that natural remediation is no longer appropriate (must then also submit a revised RAWP).***

The RAWP for the Industrial #2 Redevelopment Area was limited to soils only. Therefore, this section is not applicable.

11. ***NJDEP requires a description of all wastes generated as a result of the remedial action.***

- i. ***Tabulation of waste characterization samples collected, including the physical state of the material, volume, number of samples, analyses performed and results;***
- ii. ***Listing of types and quantities of waste generated by the remedial action during the reporting period as well as to date;***
- iii. ***Name of the disposal facility used;***

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- iv. **Transporters' dates of disposal; and**
- v. **Manifest numbers of each waste shipment.**

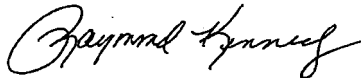
No wastes were generated during the reporting period.

12. **NJDEP requires that any additional support documentation that is available also be provided (photos, etc.).**

Photographs showing Building 11 tenant modification construction activities are included in Attachment C.

The next scheduled remedial action progress report will include remedial actions completed between January 1, 2017 and March 31, 2017. Please feel free to contact Raymond Kennedy at (614) 793-8777 with any questions regarding the update provided herein.

Sincerely,



Raymond Kennedy
Senior Project Manager

Attachments

cc: Clifford Ng – U.S. EPA Region 2
David Jennings – Duke Linden LLC
Joseph M. Sorge – J.M. Sorge, Inc.

ATTACHMENT A

Report Certification

Certification

**Duke Linden, LLC
ISRA Case Number E20040531-Industrial**

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Duke Linden, LLC, a Delaware limited liability company

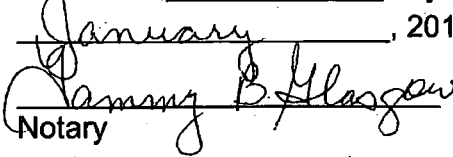
By: Duke Realty Limited Partnership, an Indiana limited partnership, its sole member

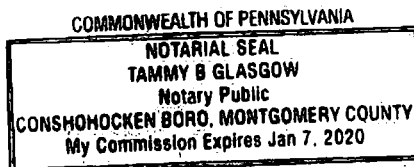
By: Duke Realty Corporation, an Indiana corporation, sole general partner

Date: 1/4/2017

By: 
John Van Vliet
Vice President, Construction

Sworn to and subscribed to before me on this 14th day of

January, 2017

Notary



ATTACHMENT B

Tabulated Concrete Analytical Results

Table 1
Duke Linden Industrial Property
801 West Linden Ave, Linden, New Jersey
Concrete Sampling Results Summary

Field Sample ID	NJ Residential Direct Contact SRS	NJ Non- Residential Direct Contact SRS	NJ 2013 Impact to Ground Water Screening Levels	CS-1	CS-2	CS-3	CS-4	CS-5	CS-6	CS-7	CS-8	CS-9	CS-10	CS-11
Lab Sample ID				460-120153-1	460-120153-2	460-120153-3	460-120153-4	460-120153-5	460-120153-6	460-120153-7	460-120153-8	460-120153-9	460-120153-10	460-120153-11
Sample Date				9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016
Matrix				Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete
Reporting Units				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs (Method 8270D)														
Acenaphthene	3,400	37,000	110	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NS	300,000	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	17,000	30,000	2400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	0.6	2.0	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	0.2	0.2	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.6	2.0	2.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	380,000	30,000	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	6.00	23	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	62	230	80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz[a,h]anthracene	0.2	0.2	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	24,000	1300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	24,000	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.6	2.0	7.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	6.00	17	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NS	300,000	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	18,000	840	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs (Method 8082A)														
Total PCBs	0.2	1.0	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Analyte concentration exceeds the standard for:

	NJ 2013 Impact to Ground Water Screening Levels
	NJ Non-Residential Direct Contact SRS
	NJ Residential Direct Contact SRS

Notes

NA: Not Analyzed

NS: No Criteria

ND: Not Detected

J: Estimated Value

B: Analyte detected in associated blank

Table 1
Duke Linden Industrial Property
801 West Linden Ave, Linden, New Jersey
Concrete Sampling Results Summary

Field Sample ID	NJ Residential Direct Contact SRS	NJ Non- Residential Direct Contact SRS	NJ 2013 Impact to Ground Water Screening Levels	CS-12	CS-13	CS-14	CS-15	CS-16	CS-17	CS-18	CS-19	CS-20
Lab Sample ID				460-120153-12	460-120153-13	460-120153-14	460-120153-15	460-120153-16	460-120153-17	460-120153-18	460-122145-1	460-122145-2
Sample Date				9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016	9/14/2016	10/17/2016	10/17/2016
Matrix				Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete
Reporting Units				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs (Method 8270D)												
Acenaphthene	3,400	37,000	110	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NS	300,000	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	17,000	30,000	2400	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	0.6	2.0	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	0.2	0.2	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.6	2.0	2.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	380,000	30,000	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	6.00	23	25	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	62	230	80	ND	ND	ND	ND	ND	ND	ND	ND	0.010 J
Dibenz[a,h]anthracene	0.2	0.2	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	24,000	1300	ND	ND	ND	ND	ND	ND	ND	ND	0.023 J
Fluorene	2,300	24,000	170	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.6	2.0	7.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	6.00	17	25	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NS	300,000	NS	ND	ND	ND	ND	ND	ND	ND	ND	0.014 J
Pyrene	1,700	18,000	840	ND	ND	ND	ND	ND	ND	ND	ND	0.018 J
PCBs (Method 8082A)												
Total PCBs	0.2	1.0	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND

Analyte concentration exceeds the standard for:

	NJ 2013 Impact to Ground Water Screening Levels
	NJ Non-Residential Direct Contact SRS
	NJ Residential Direct Contact SRS

ATTACHMENT C

Site Photographs



